AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph bridging pages 7 and 8 with the following amended paragraph:

Hidden Markov Model profiles³ were designed using the HMMER 1,8,3 software¹⁹ from nucleotide sequences corresponding to the PAS domain of a selected number of bHLH/PAS factors. A mouse EST database at GenBank (http://www.ncbi.nlm.nih.gov) was screened and an EST clone of 460 bp containing a bHLH (basic helix loop helix) PAS motif, was identified. In a preferred form of the invention, the said nucleic acid molecule has a nucleotide sequence identical with SEQ ID NO: 2 of the Sequence Listing. However, the nucleic acid molecule according to the invention is not to be limited strictly to the sequence shown as SEQ ID NO: 2. Rather the invention encompasses nucleic acid molecules carrying modifications like substitutions, small deletions, insertions or inversions, which nevertheless encode proteins having substantially the biochemical activity of the IPAS polypeptide according to the invention. Included in the invention are consequently nucleic acid molecules, the nucleotide sequence of which is at least 90% homologous, preferably at least 95% homologous, with the nucleotide sequence shown as SEQ ID NO: 2 in the Sequence Listing.

Please replace the paragraph bridging pages 13 and 14 with the following amended paragraph:

Hidden Markov Model profiles³ were designed using the HMMER 1,8,3 software¹⁹ from nucleotide sequences corresponding to the PAS domain of a selected number of bHLH/PAS factors. A mouse EST database at GenBank (http://www.ncbi.nlm.nih.gov) was screened and an EST clone of 460 bp (GenBank Ace: AA028416; SEQ ID NO: 1) containing a bHLH (basic-helix-loop-helix) PAS motif, was identified.